

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): An emulsifier-free antifoam ~~which is obtainable~~
obtained by mixing

a) from 80 to 99% by weight of at least one finely divided, virtually water-insoluble, inert solid with

b) from 1 to 20% by weight of at least one hydrophobic, organic compound which has an antifoam action and is solid at room temperature

in the absence of a solvent in a shear gradient such that the particle size of the compounds (b) having an antifoam action is reduced to a mean particle size of from 0.5 to 15 μm .

Claim 2 (Currently Amended): ~~An~~ The emulsifier-free antifoam as claimed in claim 1, wherein the mixing of the components (a) and (b) is effected in an extruder or kneader.

Claim 3 (Currently Amended): ~~An~~ The emulsifier-free antifoam as claimed in claim 1, wherein the mixing of the components (a) and (b) is carried out in a fluidized bed.

Claim 4 (Currently Amended): ~~An~~ The emulsifier-free antifoam as claimed in ~~any of claims 1 to 3~~ claim 1, wherein kaolin, sheet silicates, chalk, calcium sulfate, barium sulfate, talc, titanium dioxide, alumina, silica, satin white, cellulose, groundwood, urea/formaldehyde pigments, melamine/formaldehyde pigments, starch and/or crosslinked starch are used as the finely divided, inert solids (a).

Claim 5 (Currently Amended): ~~An~~ The emulsifier-free antifoam as claimed in ~~any of claims 1 to 4~~ claim 1, wherein a C₁₂- to C₂₆-alcohol, distillation ~~residues which are obtainable~~ residue obtained in the preparation of alcohols of >10 carbon atoms by oxo synthesis or by the Ziegler process, alkoxyated alcohols of 12 to 26 carbon atoms, 3-thiaalkan-1-ols, 3-thiaoxaalkan-1-ols, 3-thiadioxalka-1-ols and esters of said 3-thiaalkanols, 3-thiaoxaalkanols and thiadioxadialkanols are used as the hydrophobic compounds (b) having an antifoam action.

Claim 6 (Currently Amended): ~~An~~ The emulsifier-free antifoam as claimed in ~~any of claims 1 to 5~~ claim 1, wherein

(i) a C₁₂- to C₂₆-alcohol, distillation ~~residues which are obtainable~~ residue obtained in the preparation of alcohols of >10 carbon atoms by oxo synthesis or by the Ziegler process, alkoxyated alcohols of 12 to 26 carbon atoms, 3-thiaalkan-1-ols, 3-thiaoxaalkanols and thiadioxalka-1-ols in combination with

(ii) at least one compound selected from the group consisting of the glyceryl esters of fatty acids having at least 10 carbon atoms in the molecule, C₁₂- to C₃₀-alcohols, alkoxyated alcohols, esters of sugar alcohols having at least 4 OH groups or at least 2 OH groups and at least one intramolecular ether bond and a fatty acid having at least 20 carbon atoms in the molecule, fatty acid esters of C₁₂- to C₂₂-carboxylic acids with monohydric to trihydric alcohols, ketones having melting points above 45°C, the polyglyceryl esters which are obtainable by at least 20% esterification of polyglycerols which have at least 2 glycerol units with at least one C₁₂- to C₃₆-fatty acid, reaction products of mono- and diglycerides with dicarboxylic acids, reaction products of glycerol with dicarboxylic acids, which reaction products have been esterified with at least one C₁₂- to C₃₆-fatty acid, polyethylene waxes,

natural waxes, hydrocarbons having boiling points above 200°C and mixtures of said compounds

are used as component (b).

Claim 7 (Currently Amended): ~~An~~ The emulsifier-free antifoam as claimed in ~~any of~~ ~~claims 1 to 6~~ claim 1, wherein

(a) a crosslinked starch and/or cellulose fibers are used as the finely divided, inert solids and

(b) at least one C₁₂- to C₃₀-alcohol and a polyglyceryl ester of a carboxylic acid of 18 to 36 carbon atoms are used as the hydrophobic organic compound having an antifoam action.

Claim 8 (Currently Amended): ~~An~~ The emulsifier-free antifoam as claimed in ~~any of~~ ~~claims 1 to 7~~ claim 1, wherein

(a) a crosslinked starch and/or cellulose fibers are used as the finely divided, inert solids and

(b) at least one C₁₂- to C₃₀-alcohol, a polyglyceryl ester of a carboxylic acid of 18 to 36 carbon atoms and further organic esters and/or amides having an antifoam action are used as the hydrophobic organic compound having an antifoam action.

Claim 9 (Currently Amended): ~~An~~ The emulsifier-free antifoam as claimed in ~~any of~~ ~~claims 1 to 8~~ claim 1, wherein the component (a) is contained in an amount of from 88 to 95% by weight and the component (b) in an amount of from 5 to 12% by weight in the mixture, and wherein the mean particle size of the component (b) is from 0.5 to 5 µm.

Claim 10 (Currently Amended): A process for the preparation of emulsifier-free oil-in-water dispersions of mixtures of (a) at least one finely divided, virtually water-insoluble, inert solid and (b) at least one hydrophobic, organic compound which has an antifoam action and is solid at room temperature ~~by~~ comprising mixing the components (a) and (b) at up to 100°C and emulsifying/dispersing the mixture in water, wherein the mixture contains the compounds of component (a) in an amount of from 80 to 99% by weight and the compounds of component (b) in an amount of from 1 to 20% by weight, and wherein the components (a) and (b) are mixed in the absence of emulsifiers in an extruder or kneader in a manner such that the mean particle size of the component (b) in the mixture is brought to 0.5 to 15 µm.

Claim 11 (Currently Amended): ~~A~~ The process as claimed in claim 10, wherein the components (a) and (b) are mixed in a kneader at least until the mean particle size of the component (b) in the mixture is from 0.5 to 5 µm.

Claim 12 (Currently Amended): ~~The use of the oil-in-water dispersions obtainable by the process of claims 10 and 11 as an~~ An emulsifier and/or deaerator for aqueous, disperse or nondisperse liquids comprising the oil-in-water dispersion obtained by the process as claimed in claim 10.

Claim 13 (Currently Amended): ~~The use as claimed in claim 12, wherein the oil-in-water dispersions are used as antifoams and/or deaerators~~ An antifoam and/or deaerator for use in the paper industry, in the food industry and in wastewater treatment plants comprising the oil-in-water dispersion obtained by the process as claimed in claim 10.